

b) Amendments to the Claims

Please amend claims 1, 4, 12 and 25 as follows. A detailed listing of the status of the claims that are or were in the application is provided.

--1. (Currently Amended) A method of manufacturing a material comprising the steps of:

(a) contacting a solution containing a solvent[[],] a partially hydrolyzed silicon compound, and a non-ionic surfactant and a solvent for the hydrolyzed silicon compound and non-ionic surfactant with a substrate having alignment control ability to the non-ionic surfactant; and

(b) drying said substrate to remove the solvent contained in said solution to form a material having uniaxially aligned channel structures[[],] wherein the channel structures comprise the surfactant and wherein the channel structures are substantially parallel to the substrate surface.

2. (Cancelled)

3. (Cancelled)

4. (Currently Amended) A method of manufacturing a material, comprising the steps of:

(a) coating a substrate having alignment control ability to a non-ionic surfactant with a solution containing a partially hydrolyzed silicon alkoxide, and the

non-ionic surfactant and a solvent for the hydrolyzed silicon alkoxide and the non-ionic surfactant; and

(b) drying said coated substrate to form a material having uniaxially aligned channel structures, wherein the channel structures comprise the non-ionic surfactant and wherein the channel structures are substantially parallel to the substrate surface.

5. (Previously Presented) A method according to claim 4, wherein the step of coating the substrate is a step of selectively coating a desired portion of said substrate with said solution in a desired pattern and, after the drying step, a patterned mesostructured silica is formed.

6. (Previously Presented) A method according to claim 4 or 5, wherein said substrate is a silicon single crystal substrate having (110) orientation.

7. (Original) A method according to claim 4 or 5, wherein said substrate is a substrate whose surface is coated with a polymer compound film subjected to a rubbing process.

8. (Original) A method according to claim 4 or 5, wherein said substrate is a substrate whose surface is coated with a Langmuir-Blodgett film of polymer compound.

9. (Previously Presented) A method according to any one of claims 4 or 5, wherein the substrate is coated with the surfactant solution by a pen lithography method.

10. (Previously Presented) A method according to any one of claims 4 or 5, wherein the substrate is coated with the surfactant solution by an ink jet method.

11. (Previously Presented) A method according to any one of claims 4 or 5, wherein the substrate is coated with the surfactant solution by a dip coating method.

12. (Currently Amended) A method of manufacturing a material, comprising the steps of:

(a) coating a substrate having alignment control ability to a non-ionic surfactant with a solution containing a partially hydrolyzed silicon alkoxide, and the non-ionic surfactant and a solvent for the hydrolyzed silicon alkoxide and the non-ionic surfactant;

(b) drying said coated substrate to form a material having uniaxially aligned channel structures, wherein the channel structures comprise the non-ionic surfactant and wherein the channel structures are substantially parallel to the substrate surface and, thereafter,

(c) removing the non-ionic surfactant.

13. (Previously Presented) A method according to claim 12, wherein said step of coating said substrate with said solution is a step of selectively coating a desired portion of said substrate with said solution in a desired pattern.

14. (Previously Presented) A method according to claim 12 or 13, wherein said substrate is a silicon single crystal substrate having (110) orientation.

15. (Original) A method according to claim 12 or 13, wherein said substrate is a substrate whose surface is coated with a polymer compound film subjected to a rubbing process.

16. (Original) A method according to any one of claims 12 or 13, wherein said substrate is a substrate whose surface is coated with a Langmuir-Blodgett film of polymer compound.

17. (Previously Presented) A method according to any one of claims 12 or 13, wherein said substrate is coated with said surfactant solution by a pen lithography method.

18. (Previously Presented) A method according to any one of claims 12 or 13, wherein said substrate is coated with said surfactant solution by an ink jet method.

19. (Previously Presented) A method according to any one of claims 12 or 13, wherein said substrate is coated with said surfactant solution by a dip coating method.

20. - 23. (Cancelled).

24. (Previously Presented) A method according to Claim 1, further comprising the step of removing said surfactant.--

25. (Currently Amended) A method of manufacturing a material comprising the steps of:

(a) contacting a solution containing solvent a hydrolyzed silicon compound, silicon and a non-ionic surfactant and a solvent for the hydrolyzed silicon compound and the non-ionic surfactant with a substrate having alignment control ability to the non-ionic surfactant; and

(b) drying said substrate to remove the solvent contained in said solution to form a material having uniaxially aligned channel structures which are substantially parallel to the substrate surface,

wherein a surface of the substrate has a hydrophobic region and a hydrophilic region.